

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Parts 2 and 25 of the) ET Docket No 98-206
Commission's Rules to Permit Operation) RM-9147
of NGSO FSS Systems Co-Frequency with) RM-9245
GSO and Terrestrial Systems in the Ku-)
Band Frequency Range;)
)
Amendment of the Commission's Rules)
to Authorize Subsidiary Terrestrial Use)
of the 12.2-12.7 GHz Band by Direct)
Broadcast Satellite Licensees and Their)
Affiliates; and)
)
Applications of Broadwave USA, PDC)
Broadband Corporation, and Satellite)
Receivers, Ltd. to Provide a Fixed Service)
in the 12.2-12.7 GHz Band)

**PETITION FOR RECONSIDERATION OF THE SATELLITE
BROADCASTING AND COMMUNICATIONS ASSOCIATION**

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To: The Commission

**PETITION FOR RECONSIDERATION OF SATELLITE
BROADCASTING AND COMMUNICATIONS ASSOCIATION OF
MVDDS SECOND REPORT AND ORDER**

Satellite Broadcasting and Communications Association ("SBCA"), by its attorneys and pursuant to Section 1.429 of the Commission's rules, 47 C.F.R. § 1.429, hereby submits this Petition for Reconsideration of the Commission's decision in the *Second Report and Order*¹ in the above-captioned proceeding to adopt technical and service rules for terrestrial fixed Multichannel Video Distribution and Data Service

¹ *Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range*, Memorandum Opinion and Order and Second Report and Order, 17 FCC Rcd 9614 (2002) ("*Second Report and Order*"). SBCA has filed a Petition for Review with the U.S. Court of *Fn Con'd*

("MVDDS") operations in the 12.2-12.7 GHz band,² which is currently allocated on a primary basis to Broadcast Satellite Service (also referred to as Direct Broadcast Satellite Service or "DBS"). As demonstrated herein, the regulatory scheme for MVDDS adopted by the Commission unlawfully permits MVDDS operations to interfere with DBS and therefore does not fulfill the fundamental requirement that MVDDS not cause harmful interference to DBS operations in the 12.2-12.7 GHz band. Accordingly, the MVDDS technical and service rules adopted by the Commission in this proceeding are arbitrary, capricious and contrary to law.

I. INTRODUCTION AND SUMMARY

On behalf of DBS subscribers throughout America who stand to be harmed by the Commission's MVDDS decisions, SBCA objects to the MVDDS technical and service rules adopted by the Commission in the *Second Report and Order*. Throughout the MVDDS proceeding, the Commission has disregarded the evidence submitted by the DBS operators, the findings and recommendations of its own expert (the MITRE Corporation), and the rights and expectations of DBS subscribers and service providers. The Commission has gone even further astray in the *Second Report and Order* by ignoring 20 years of its own rulings and those of the courts which confirmed the conversion of FS over a five-year period to de facto secondary status in the 12 GHz band vis-à-vis DBS.

Appeals for the District of Columbia Circuit of both the First Report and Order as well as the Memorandum Opinion and Order in this docket.

² As a party to this proceeding and a trade association whose members' interests are adversely affected by the Commission's decision, SBCA has standing to file this petition. 47 C.F.R. § 1.106(b)(1). SBCA members EchoStar Satellite Corporation and DirecTV are filing a joint *Fn Con'd*

As Commissioner Martin correctly observed in his compelling statement dissenting in part and approving in part, the MVDDS technical and service rules adopted by the majority are arbitrary, capricious and contrary to law because they (i) fail to protect DBS service providers and existing and new DBS subscribers from harmful interference, as required by law; (ii) fail to provide clear standards for distinguishing between “permissible” and “harmful” interference caused to DBS subscribers; (iii) fail to impose entry requirements on MVDDS operators that have any realistic likelihood of identifying and adequately protecting DBS subscribers from harmful interference; and (iv) fail to place the burden of mitigation where it squarely belongs – on the MVDDS operator. In short, the Commission’s actions constitute a wholesale failure to abide by the law, including its own fully developed policies and precedents.

II. ARGUMENT

A. MVDDS May Not Lawfully Interfere With DBS Service

As a matter of law, no Fixed Service (“FS”) operation in the 12 GHz band is permitted to cause interference to DBS service. Although DBS and FS operations are listed in the Table of Frequency Allocations as “co-primary” services in the 12 GHz band (based on the use of capital letters to designate each service), this allocation is modified by footnote S5.490 of the U.S. Table of Allocations, which makes clear that FS operates on a non-interference basis with respect to DBS service. Specifically, footnote S5.490 states that:

petition for reconsideration that addresses the technical flaws in the MVDDS service rules in a comprehensive manner. SBCA has reviewed and fully supports that filing.

In Region 2 [which includes the United States], in the band 12.2-12.7 GHz, existing and future terrestrial radiocommunication services shall not cause harmful interference to space services operating in conformity with the broadcasting-satellite Plan for Region 2 contained in Appendix S30 [*i.e.*, DBS service].

Significantly for this proceeding, this arrangement has its genesis in the Commission's initial authorization of DBS and resulted from its desire to provide a temporary accommodation to incumbent fixed microwave operations that were operating in the 12 GHz band at the time it authorized DBS. Specifically, in an effort to facilitate the launch of DBS systems domestically prior to the outcome of the Region 2 Administrative Radio Conference-1983 ("RARC-83"), which would set technical parameters and orbital slots, the Commission adopted a plan to phase in DBS's priority status over terrestrial services in the 12 GHz band.³ Under the plan, the Commission adopted DBS as a co-primary service with FS so that incumbent FS operators would not have to protect the DBS entrants from interference. However, the plan also effectively limited this co-primary status to five years, after which FS operations were to become secondary to DBS and required to operate "on a strict non-interference basis and make any and all adjustments necessary to prevent interference to operating DBS systems."⁴

³ See *Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcast Satellites for the Period Following the 1983 Regional Administrative Radio Conference*, Report and Order, 90 F.C.C. 2d 676 (1982) ("*DBS Order*"). This decision adopted DBS on a primary basis, but postponed the final adoption plan to accommodate any changes that might flow from RARC-83, which had not yet occurred. RARC-83 was concluded July 18, 1983. The Final Acts of the RARC-83 were signed by the U.S. (FCC Public Notice, Mimeo No. 5605, July 28, 1983).

⁴ As the Commission put it, "to provide for the continued growth of FS operations, the Commission will continue to license terrestrial FS users in the 12.2-12.7 GHz band" as follows:

- (a) Terrestrial operations authorized prior to the issuance of the *Report and Order* [implementing RARC-83] will not be required to protect domestic DBS reception from interference for a period of five years from the date that *Report and Order* is issued. Since it is the Commission's firm intention to issue the referenced *Report and Order* no later than September 4, 1983, the five-year period should expire no later than September 4, 1988.

Fn Con'd

The Commission has consistently confirmed that it intended DBS to be primary in the 12 GHz band and to be free from interference from FS operations. In proposing DBS service, the Commission stated that:

To assure that interference from fixed service operators will not prevent reception of DBS signals . . . terrestrial licensees in the 12 GHz band will be required to make whatever adjustments in technical parameters or assigned frequencies necessary to prevent harmful interference to operating DBS systems.⁵

In adopting the interim sharing plan, the Commission made clear that the co-primary status of DBS and FS was only a temporary measure while FS operations transitioned out of the band:

[W]e now believe that the option of allowing a *transition period* with coequal status for DBS and FS would provide a more equitable and efficient solution, and that it would allow introduction of DBS service while minimizing the cost to the existing terrestrial users.⁶

Subsequent to the expiration of this five-year period, it is the Commission's intent that such terrestrial operations operate on a strict non-interference basis and make any and all adjustments necessary to prevent interference to operating DBS systems.

(b) Terrestrial operations authorized after the issuance of the referenced *Report and Order* will be licensed on the condition that they not cause any harmful interference to DBS systems. *It is the Commission's intent that such terrestrial operations operate on a strict non-interference basis and make any and all adjustments necessary to prevent interference to operating DBS systems.* The issue of what constitutes harmful interference to DBS will be studied by the Commission and will be disposed of in the 1983 *Report and Order*.

(c) Notwithstanding any other conditions, no FS operation will be permitted to cause interference to DBS systems of other countries operating in accordance with the plan established at the 1983 RARC. *Id.* at 702 ¶ 67 (emphasis added).

⁵ *Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcast Satellites for the Period Following the 1983 Regional Administrative Radio Conference*, 86 F.C.C.2d 719, 732 ¶ 36 (1981) (emphasis added).

⁶ *DBS Order* at 693 ¶ 46 (emphasis added). The Commission also concluded that DBS primacy in the 12 GHz band was necessary to comply with the 1979 World Administrative Radiocommunication Conference's ("WARC-79") mandate to prevent terrestrial operations from interfering with DBS reception, stating that "WARC-79 placed restrictions on the terrestrial services at 12 GHz, stating that '... existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in accordance with the broadcasting-satellite Plan [i.e., the ITU Region 2 Plan for the Broadcast Satellite Service
Fn Con'd

The Commission confirmed the primacy of DBS in the 12 GHz band adopted in the *DBS Order* immediately following the completion of RARC-83:

The Final Acts of the RARC [1983] confirm the domestic allocation developed in Docket 80-603 for the 12.2-12.7 GHz band. . . . Consequently, the allocation for DBS in the entire 12.2-12.7 band made in Docket 80-603 will remain in effect domestically, as planned. *The fixed service is secondary to the DBS service except that existing terrestrial uses will not become secondary to Broadcasting Satellite use until five years after the date this Rulemaking item is adopted.* ⁷

The following year, the U.S. Court of Appeals for the District of Columbia upheld the Commission's priority scheme for DBS adopted in the *DBS Order*, concluding:

The DBS Order grants DBS eventual priority in the 12.2-12.7 GHz band (the 12 GHz band). Currently, a variety of terrestrial microwave operators use that band for point-to-point internal and external communications needs. . . . Under the regime created by the DBS Order, these FS Users have a five-year transition period during which they can continue to operate without any need to avoid interference with DBS. After that period, DBS will have priority. . . . ⁸

In 1994, just before the first DBS systems were to become operational, the Commission issued a public notice to remind FS operators in the 12 GHz band of their secondary status:

Terrestrial authorizations for the 12 GHz band are conditioned on a secondary basis to DBS service. Therefore, in the event that DBS service experiences interference from terrestrial point-to-point operations, it is the sole responsibility of terrestrial licensees to eliminate such interference immediately. To eliminate interference, it may be necessary for a terrestrial licensee to cease its operations immediately. Failure to cure harmful interference could result in Commission

adopted at RARC-83] to be prepared... and shall not impose restrictions on the elaboration of such a Plan. . . ." *Id.* at 704 ¶ 73 (quoting from International FNM 3783D).

⁷ *Spectrum Utilization Policy for the Fixed and Mobile Services in the 947 MHz-40 GHz Band*, 48 Fed. Reg. 50722 (Nov. 3, 1983) (emphasis added). The Commission added that "Since the full 12 GHz band has been allocated to DBS by the 1983 RARC and the Commission anticipates that several DBS systems will be in operation by 1988, continued use of the 12 GHz band for terrestrial operations will only be possible on a secondary basis after September 9, 1988. Licensees who choose to stay in the 12 GHz band on that basis do so at their own risk after that date." *Id.*

⁸ *Nat'l Ass'n of Broadcasters v. FCC*, 740 F.2d 1190, 1209 (D.C. Cir. 1984) (emphasis added).

enforcement action, including the imposition of any appropriate sanctions.⁹

The plain language of footnote S5.490 itself – which mandates that “existing *and future* terrestrial radiocommunication services shall not cause harmful interference” to DBS in the 12 GHz band – further confirms that the interference protection afforded to DBS is not time-limited.

It is clear that Congress also intends that FS services in the 12 GHz band operate on a non-interference basis with respect to DBS. In 1999, Congress enacted the Rural Local Broadcast Signal Act (“RLBSA”), which required the Commission to “ensure that no facility licensed or authorized” under the statute “causes harmful interference to the primary users of that spectrum [*i.e.*, the DBS service].”¹⁰ In 2000, the Congress enacted a statutory provision entitled “Prevention of Interference to Direct Broadcast Satellite Services,”¹¹ which required “[a]n independent technical demonstration of any terrestrial service technology . . . in the direct broadcast satellite frequency band to determine whether the terrestrial service technology proposed to be provided by that entity will cause harmful interference to any direct broadcast satellite service.”¹² In short, DBS has always been regarded – administratively, legislatively, and judicially – as having legally enforceable rights against interference caused by FS operations in the 12 GHz band.

⁹ *Initiation of Direct Broadcast Satellite Service - Effect on 12 GHz Terrestrial Point-to-Point Licensees In the Private Operational Fixed Radio Service*, 10 FCC Rcd 1211, 1211 (1994) (emphasis added).

¹⁰ Rural Local Broadcast Signal Act, Pub. L. No. 106-113, § 2002(b)(2), 113 Stat. 1501A-544, 545 (1999).

¹¹ "Launching Our Communities" Access to Local Television Act of 2000, Pub. L. No. 106-553, § 1012, 114 Stat. 2762, 2762A-141 (2000).

¹² *Id.* § 1012(a).

In the *Second Report and Order*, the Commission acknowledges the existence of footnote S5.490, but attempts to sidestep both its significance and the 20-year history of transitioning FS to secondary status to accommodate the new DBS service by contending – for the first time since it initiated this docket in 1998 and in contradiction to the *First Report and Order* in which it authorized the MVDDS service¹³ – that the footnote’s interference provisions are limited to DBS systems implemented in accordance with Appendix S30 of the ITU’s Radio Regulations. Specifically, the Commission contends – in a footnote – that:

Although the fixed and satellite services are co-primary in the Table of Allocations, the fixed services must not cause harmful interference to the DBS assignments that have been implemented in accordance with Appendix S30 as opposed to any DBS operations that are not consistent with the Plan. We note that, in general, the DBS satellites have characteristics that require modification to the Plan assignments. These assignment modifications have to be coordinated through the Appendix S30 process with other affected assignments and accepted into the Plan before they can be protected from the existing and future fixed services. Hence, it is more efficient to implement sharing and protection guidelines between the fixed service and these modified DBS assignments as outlined herein rather than wait for the outcome of the ITU coordination process, which is not guaranteed.¹⁴

¹³ See *Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range*, First Report and Order and Further Notice of Proposed Rule Making, 16 FCC Rcd 4096 (2000) (“*First Report and Order*”) (“The 12.2-12.7 GHz band is allocated to the FS on a primary basis; however, the service is prohibited from causing harmful interference to the BSS” (citing 47 C.F.R. § 2.106 n.844 (subsequently renumbered to S5.490 when the U.S. Table of Allocation footnote numbers were harmonized with the ITU numbering scheme in 2000) and 47 C.F.R. 101.147(p)). *Id.* at 4102 ¶ 6; “We also conclude that MVDDS can operate in the 12.2-12.7 GHz band under the existing FS allocation. Under this [FS] allocation...MVDDS operations would not be permitted to cause harmful interference to the BSS” *Id.* at 4161 ¶ 167; “We conclude that MVDDS can operate in the 12.2-12.7 GHz band under the existing primary allocation, which requires that a Fixed Service not cause harmful interference to the co-primary BSS.” *Id.* at 4177 ¶ 213).

¹⁴ *Second Report and Order* at 9652 n.216.

The Commission's position is completely inconsistent with the interpretations and policies it has issued on this subject for the past decade and a half and represents a *post hoc* rationalization for the its decision to shoehorn MVDDS into the 12 GHz band. Almost since the inception of DBS, the Commission, in an effort to encourage the domestic development of DBS service, has permitted assignments that are *not* implemented in accordance with Appendix S30. Not once during this lengthy period has the Commission made the non-interference obligations imposed on fixed service operations in the 12 GHz band contingent upon DBS operators' strict conformance with Appendix S30. Indeed, the Commission's above-cited 1994 warning to FS operators of their secondary status with respect to DBS was issued despite the fact that the DBS systems then authorized had characteristics that required modification to the Appendix S30 assignments. Further, in explaining its so-called "non-conforming use" policy for DBS adopted in 1986,¹⁵ the Commission indicated that the non-interference obligations of fixed service operations could be nullified by the non-conforming aspects of a DBS system, but only with respect to those fixed service operators that existed at the time the non-conforming use was implemented:

To remain within the bounds of the justification for the dislocation of other services operating in the DBS band, non-conforming uses of DBS facilities will not be entitled to protection from OFS operations *existing at the time of the initiation of the non-conforming service*.¹⁶

¹⁵ The Commission developed the non-conforming use policy in a trio of decisions, which allowed DBS operators to provide services that did not strictly comport with the definition of DBS service as a means of generating revenues to meet the costs of launching a DBS system. *See Petition of United States Satellite Broadcasting Co., Inc.*, Memorandum Opinion and Order, 1 FCC Rcd 977, 979 ¶ 15 (1986) ("1986 USSB Declaratory Ruling"); *Potential Uses of Certain Orbital Allocations by Operators in the Direct Broadcast Satellite Service*, Report and Order, 6 FCC Rcd 2581 (1991); *Rules and Policies for the Direct Broadcast Satellite Service*, Report and Order, 11 FCC Rcd 9712 (1995).

¹⁶ *1986 USSB Declaratory Ruling* at 979 ¶ 15 (emphasis added).

Accordingly, fixed service operators entering the 12 GHz band *after* any non-conforming use was authorized – which is analogous to the relationship between any MVDDS operator and every existing DBS licensee – continue to be subject to the non-interference requirements. The Commission cannot with a mere footnote in the *Second Report and Order* rewrite almost two decades of its own continuous efforts to permit and indeed encourage the domestic DBS industry to develop outside the strict confines of the Plan for Region 2 contained in Appendix S30.

Having disregarded 20 years of legal precedent to allow it to characterize MVDDS as co-primary with DBS, the Commission compounds its error by imposing on DBS operators “an obligation to ensure that interference is not caused to existing operations.”¹⁷ Thus, under the MVDDS service rules, the burden of preventing and remedying interference does not rest solely with the source of the interference – the new MVDDS operators. Rather, DBS operators and subscribers are also required to bear responsibility for interference caused by MVDDS. Even if the Commission were correct that DBS and MVDDS are properly characterized as co-primary services, imposing responsibility for MVDDS interference upon DBS operators and subscribers is contrary to the Commission’s long-held interpretations of co-primary relationships. Specifically, the fundamental principle of co-primary operations is the first-in-time rule, under which the first co-primary licensee in the band is entitled to be free from interference caused by subsequent entrants in the band.¹⁸ Because DBS clearly preceded MVDDS in the 12

¹⁷ *Second Report and Order* at 9652 ¶ 87, 9654-55 ¶ 92.

¹⁸ See, e.g., *Preparation for International Telecommunication Union World Radiocommunication Conferences*, Report, 10 FCC Rcd 12783, 12803 ¶ 55 (1995) (observing that in the spectrum allocation process, “proposed allocations are subject to the fundamental *Fn Con’d*”

GHz band, it is protected against interference from MVDDS operations by the first-in-time principle that governs co-primary relationships.¹⁹ Yet, as explained below, the

principle that all existing co-primary spectrum users are protected from harmful interference that may be caused by later-in-time co-primary users.” (citing ITU Constitution, Final Acts of the Additional Plenipotentiary Conference, Art. 45 (Geneva, 1992)); see also *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, Second Report and Order, 15 FCC Rcd 12315, 12361 ¶ 133 (2000); *Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, Notice of Proposed Rulemaking, 15 FCC Rcd 22657, 22663-64 ¶ 15 (2000); *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, 15 FCC Rcd 12315, 12361 ¶ 133 (2000).

¹⁹ Further, the authorities cited by the Commission to support its contention that primary users must “incorporate protective measures, up to and including antenna replacement, to avoid harmful interference” (*Second Report and Order* at 9654-55 n.226) are inapplicable to the DBS/MVDDS relationship. The requirements to swap out Instructional Television Fixed Service (“ITFS”) receive antennas and fixed microwave directional receive (and transmit) antennas set forth in 47 C.F.R. §§ 74.937(a) and 101.115(d), respectively, are both distinguishable from the DBS/MVDDS situation on similar grounds. First, these antenna replacement requirements apply to licensees in the same service whereas DBS and MVDDS are separate services. Second, the interference which triggers the requirements results from the inadequacy of the receive antenna itself (in the case of the fixed microwave service, failure to meet prescribed performance standards), whereas the cause of interference in the DBS/MVDDS context is the MVDDS signals that are intentionally directed into the backlobes of DBS receive antennas (which are manufactured in accordance with industry standards and comply and are marketed in conformance with the Commission’s equipment authorization rules). Third, the antennas being replaced are owned (or controlled) by the ITFS and fixed microwave licensees, whereas DBS antennas are owned by consumers who are not subject to the Commission’s jurisdiction.

The other authority cited by the Commission – 47 C.F.R. § 90.361 – is even more off point. Section 90.361 is a “safe harbor” provision setting forth technical criteria which, if met by certain Part 15 or Part 97 operations, provides a presumption of non-interference with respect to multilateration Location and Monitoring Service (“LMS”). The band at issue is the 902-928 MHz Industrial, Scientific and Medical (“ISM”) band, which has for decades been ubiquitously populated by ISM devices as well as Part 15 devices (at the Commission’s encouragement). (Although the FCC characterizes LMS as “primary” in note 226, LMS is in fact a secondary service in the band. See *Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems*, Report and Order, 10 FCC Rcd 4695, ¶ 31 (1995)). The ubiquitous deployment of certain Part 15 devices, such as spread spectrum systems, had established a *de facto* presence that stood to be put in jeopardy by the introduction of wide-band LMS multilateration systems, due to their similar modulation characteristics. Rather than risk having to referee interference claims throughout the country or eject Part 15 devices from the band altogether, the Commission adopted the “safe harbor.” In contrast, DBS is a primary service and it is not entering the band – it has been established in the 12 GHz band for two decades – and it is not being required to accommodate an existing operation. Rather, the Commission is requiring DBS to protect an incoming service that, by law, can only operate on a non-interference basis to DBS.

Fn Con’d

MVDDS service rules adopted in the *Second Report and Order* fail to properly accord this first-in-time protection to DBS service providers or future DBS subscribers and unlawfully limit the interference protection afforded to existing DBS subscribers to a one-year period.

B. The MVDDS Mitigation Rules Are Ambiguous and Unlawfully Place the Burden of Preventing and Remediating MVDDS Interference on DBS Licensees and DBS Subscribers

Giving lip service to the primacy of DBS, the *Second Report and Order* requires MVDDS operators initially to design and site their systems so as not to cause “harmful” interference to existing DBS subscribers.²⁰ If such interference to existing DBS subscribers occurs, the MVDDS operator must take “corrective” action.²¹ The MVDDS service rules, however, provide no quantitative definition of what constitutes “harmful” interference levels. The *Second Report and Order* suggests that harmful interference is interference that would “seriously degrade, obstruct, or repeatedly interrupt the DBS signal under clear sky conditions.”²² In another section of the decision, however, the Commission suggests that harmful interference may be “a tangible detrimental impact on DBS caused by MVDDS operations.”²³ In any event, the indefinite terms used by the Commission to describe harmful interference caused by MVDDS are rendered completely useless by the Commission’s decision to adopt EPFD levels that allow for

²⁰ *Second Report and Order* at 9653 ¶ 88.

²¹ *Id.*

²² *Id.*

²³ *Id.* at 9651-52 ¶ 85.

increased outages in amounts that *start* at 10 percent with no discernable upper limit.²⁴ More specifically, because the Commission arbitrarily adopted EPFD levels based upon the *average* outage increase of the top 32 television markets, the *actual* outage increase experienced in any given market may vary exponentially above the mean.²⁵ As the Commission put it, “in a few instances, the increase in unavailability was on the order of 20-30%”²⁶ – and that was just among the 32 markets from which the average values were derived. Given the wide fluctuation in increased outages that can be expected across the United States, a quantitative measure is necessary to define outage levels that are “harmful” so that these are not swallowed up by the averaging process.

The lack of precision in defining harmful interference weakens the interference rights accorded to DBS subscribers to the point of non-existence. Specifically, the MVDDS service rules state:

The MVDDS licensee must satisfy all complaints of interference to DBS customers of record which are received during a one year period after commencement of operation of the transmitting facility. Specifically, the MVDDS licensee must correct interference caused to a DBS customer of record or cease operation *if it is demonstrated that the DBS customer is receiving harmful interference from the MVDDS system or that the MVDSS signal exceeds the permitted EPFD level at the DBS customer location.*²⁷

²⁴ *Id.* at 9643 ¶ 72; 9650-51 n.210.

²⁵ *Id.* at 9650 ¶ 83.

²⁶ *Id.* at 9650-51 n.210. These disparities are particularly difficult to reconcile with the Commission’s conclusion that “the appropriate criterion on which to base EPFD levels is increased DBS unavailability expressed as a percentage of the baseline unavailability.” *Id.* at 9644 ¶ 76. If the Commission intended to develop EPFD levels based upon a criterion that reflects increased DBS unavailability expressed as a percentage that fluctuates from 10-30 percent and perhaps much higher, depending on how much it is raining and which way the wind is blowing, then it appears to have achieved its intended purpose.

²⁷ 47 C.F.R. § 101.1440(g).

While the words on the page may appear protective of DBS customers, the reality is likely to be much different. First, as discussed below, because of ambiguities in the MVDDS entry rules, it is very likely that many DBS subscribers will not be included in the list of “DBS customers of record,” and therefore, these incumbent DBS consumers will be arbitrarily excluded from the “interference complaints” process. Second, relying upon DBS consumers and DBS licensees to demonstrate that they are experiencing “harmful” interference from an MVDDS system is unrealistic when there is no quantitative definition of harmful interference. It is equally difficult to fathom how a DBS consumer will be able to determine when EPFD levels have exceeded the “permitted” levels. Indeed, it is unreasonable to expect that DBS consumers who experience interference will do anything other than assume that the DBS service they are receiving is poor and blame the DBS provider. Finally, limiting the interference protection to a one-year period violates both footnote S5.490 and the Commission’s first-in-time policies (as discussed above). Indeed, the Commission’s own expert, the MITRE Corporation, recommended that DBS subscribers be protected for the duration of the MVDDS transmitter operations.²⁸

The MVDDS service rules also unlawfully place the burden of mitigation of interference caused to future DBS consumers upon DBS licensees. The MVDDS service rules require that thirty days after the DBS licensee is notified of a “potential” MVDDS site, the DBS licensee:

[has] the responsibility of ensuring that all future installed DBS receive antennas on its system are located in such a way as to avoid the MVDDS signal. These

²⁸ The MITRE Corporation, *Analysis of Potential MVDDS Interference to DBS in the 12.2-12.7 GHz Band*, at 6-6 (April 2001).

later installed receive antennas shall have no further rights of complaint against the notified MVDDS transmitting antenna(s).²⁹

For reasons discussed above, future DBS subscribers should have the same band priority rights against receiving interference from MVDDS operations in the 12 GHz band as DBS customers who subscribed prior to the introduction of MVDDS service into the 12 GHz band. Accordingly, the MVDDS service rules are unlawful on their face. Even if this were not the case, to hold DBS licensees responsible for overseeing the antenna siting decisions of DBS subscribers is inappropriate, as DBS licensees have no control over antenna installations, which are often performed by the electronic retail outlets that sell DBS consumer equipment.³⁰

Further, increasing numbers of DBS consumers self-install their equipment to save installation fees. Because routine installations have been automated to a great extent, no technical expertise is required for the typical DBS antenna self-installation. The introduction of MVDDS in a given market may make self-installation infeasible, however, because there is no way to automate a self-installation process that involves mitigation of MVDDS signals.

²⁹ 47 C.F.R. § 101.1440(e).

³⁰ Many DBS antenna installations are handled by the electronic product retail outlets that sell DBS equipment and/or regional installation subcontractors. These installers have the technical expertise to perform basic antenna installations, but may lack sufficient technical expertise to identify and/or compensate for an otherwise interfering MVDDS signal. The Commission asserts that DBS licensees can merely “adjust their installation guidelines for future DBS customers” (*Second Report and Order* at 9654 ¶92), but compensating for interfering MVDDS signals at any given location may require a number of mitigation techniques that are based upon in-field engineering judgments.

C. The Commission’s MVDDS Entry Rules Are Unworkable and Injurious to DBS Consumers

For the reasons described above, the interference protection rules conjured up by the Commission are inadequate and contrary to law and policy. Yet even these inadequate protections will not be available to many DBS subscribers because the MVDDS entry rules potentially leave many DBS subscribers unaccounted for. The MVDDS service rules prohibit an MVDDS licensee from commencing service unless it can “ensure that the EPFD from its transmitting antenna at all DBS customers of record locations is below the values listed [in the regulations].”³¹ To determine the DBS customers of record, however, the rules only require the MVDDS licensee to conduct a “survey of the area around its proposed transmitting antenna site”³² – there are no requirements to ensure that the survey process is conducted accurately and there is no workable safeguard to capture DBS subscribers not readily identifiable. For example, there may be many circumstances, such as fenced properties, where the MVDDS licensee may not be able to accurately determine either the EPFD levels thereon or whether the property is even a DBS customer location.

Furthermore, the critical issue is not only the EPFD levels at “customer of record locations” but also, and perhaps more importantly, the EPFD levels at the location of the customer’s DBS antenna. Compliance with the former does not necessarily ensure compliance with the latter. For example, the customer of record’s DBS antenna may be located some distance from the customer’s dwelling, and the two locations may

³¹ 47 C.F.R. § 101.1440(a).

³² *Id.*, § 101.1440(b).

experience different EPFD levels. Further, DBS licensees are not provided sufficient input into the MVDDS entry process to remedy these inadequacies. More specifically, the MVDDS service rules merely require that the MVDDS licensee “take into account” any “relevant information” provided by the DBS licensees in response to the survey and other notification information provided by the MVDDS licensee.³³ The rules do not, for example, require the MVDDS licensee to check EPFD levels at DBS customers of record that were not identified in the initial survey, but were identified in the DBS licensees’ response to the survey.³⁴ In fact, the rules do not require any specific action at all. In any event, DBS licensees themselves often do not know the location of the DBS antennas on their subscribers’ properties, but rather know the billing addresses. Accordingly, it is inappropriate to rely upon the DBS licensees to oversee the MVDDS survey process, both because they lack specific information required to make the process function effectively and because there is no mechanism for ensuring that their input will be followed. The big losers in this process, of course, are the DBS consumers, who have been abandoned by the Commission in its misguided effort to overlay MVDDS onto incumbent DBS services.

Even if the DBS consumer’s entire property were taken into account, the Commission’s survey requirements impermissibly freeze the DBS antenna siting choices of DBS consumers and in so doing violate their band priority status as well as their right to the quiet enjoyment of their property. As the Commission explains it, the MVDDS

³³ *Id.*, § 101.1440(d)(3).

³⁴ *Id.*, § 101.1440(d).

survey requirements allow the MVDDS operator to ignore non-compliant EPFD levels based upon the location of the DBS antenna at the time of the survey:

For example, if a DBS receive antenna is within the zone predicted by the model where the EPFD level might be exceeded, but that antenna is mounted on the back of a structure facing away from the MVDDS transmitting antenna site such that the MVDDS signal would be blocked from the DBS antenna, the MVDDS licensee could make a determination that its signal level at that antenna would comply with the rules.³⁵

Under the Commission's example, if the DBS subscriber later moves the DBS antenna so that it is no longer blocked by the structure, the antenna could then be subject to EPFD levels above the limits and could receive interference above the "permissible" level. Further, because the MVDDS service rules unlawfully limit the MVDDS licensee's obligation to eliminate non-compliant EPFD levels to one year from the commencement of its operation, if the DBS subscriber in the example moved the DBS antenna more than one year after MVDDS notification, the DBS subscriber would have no recourse under the MVDDS rules to require the MVDDS operator to correct the non-compliant EPFD levels. In short, DBS consumers falling into this category, including consumers who have owned their DBS systems for many years and who wish to re-locate their DBS antennas on their property, as is clearly their right, could be subject to interference from MVDDS operations that the MVDDS licensee would have no obligation to remedy.³⁶

³⁵ *Second Report and Order* at 9653-54 ¶ 91.

³⁶ The MVDDS service rules addressing future MVDDS compliance are similarly flawed. The MVDDS regulation addressing protection of DBS states that:

In the event of either an increase in the EPFD contour in any direction or a major modification as defined in § 1.929 of this chapter, such as the addition of an antenna, to an MVDDS station, the procedures [requiring the MVDDS licensee to provide survey and other coordination information to the DBS licensee, and the requirement that 30 days following receipt of such information the DBS licensee assume responsibility for ensuring that future-installed DBS antennas avoid MVDDS signals] of paragraphs (d) and (e) of this section and rights of complaint begin anew. 47 C.F.R. § 101.1440(f).

Fn Con'd

CONCLUSION

For the reasons set forth above, SBCA respectfully requests that the Commission reconsider its *Second Report and Order* and modify it to provide effective and meaningful protection for DBS providers and customers against harmful interference from MVDDS operations or rescind the authorization for MVDDS to operate in the 12 GHz band.

Respectfully submitted,

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Although the regulation requires the MVDDS licensee to provide coordination information that includes survey results and “begins anew” the so-called “rights of complaint,” it does not affirmatively require the MVDDS licensee to perform another survey. This ambiguity must be resolved, since the “rights of complaint” are meaningless without current survey information.

CERTIFICATE OF SERVICE

I, Gwendolynne M. Chen, do hereby certify that I have on this 26th day of July 2002, had copies of the foregoing **PETITION FOR RECONSIDERATION OF THE SATELLITE BROADCASTING AND COMMUNICATIONS ASSOCIATION** delivered to the following via electronic mail (indicated by *) or via U.S. mail:

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